



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/810,943	03/16/2001	Ralf Oestreicher	60,426-268	7794

24500 7590 07/15/2003

SIEMENS CORPORATION
INTELLECTUAL PROPERTY LAW DEPARTMENT
170 WOOD AVENUE SOUTH
ISELIN, NJ 08830

EXAMINER

NGUYEN, TAN QUANG

ART UNIT PAPER NUMBER

3661

DATE MAILED: 07/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
---------------------------------	-------------	---	---------------------

EXAMINER

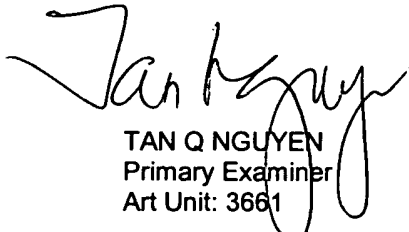
ART UNIT	PAPER
----------	-------

17

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents


TAN Q NGUYEN
Primary Examiner
Art Unit: 3661

Office Action Summary

Applicant(s) N .

09/810,943

Examiner

TAN Q NGUYEN

Applicant(s)

OESTREICHER ET AL.

Art Unit

3661

– The MAILING DATE of this communication appears on the cover sheet with the corresponding address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 36-73 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 56 and 57 is/are allowed.
- 6) ☒ Claim(s) 36-55 and 58-73 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAIL ACTION

Notice to Applicant(s)

1. This Office Action is in response to the Applicant's amendment filed on June 21, 2003. As per request, claim 56 has been amended. Thus, claims 36-73 are still pending.
2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is somewhat persuasive and, therefore, the finality of that action is withdrawn.

Interference

3. Claims 36-40 of this application has been copied by the applicant from U.S. Patent No. 6,039,344. These claims are not patentable to the applicant because of the following rejections.
4. An interference cannot be initiated since a prerequisite for interference under 37 CFR 1.606 is that the claims be patentable to the application subject to a judgment in the interference.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).
7. Claims 36-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over the published Research Disclosure 39916 in view of Gognon (5,810,392) and Harris (3,661,220).
8. With respect to claim 36, the Research disclose teaches a seat frame, four load cells are attached between the seat frame and the seat track at the mounting points (see figure 1), and a vehicle occupant protection device responsive to the output of the load cells (see figure 2).
9. The Research disclosure does not explicitly disclose the use of weight sensor assemblies in the form of a strain gauge and a plurality of deflectable mounting structures which together bear the entire weight of the frame. However, Gagnon similarly discloses a seat occupant weight sensing system in which load cells can be mounted between a rigid member and a seat pan at four corners as shown in figure 3. Gagnon further suggests that each sensor may be for example a strain gauge, a load cell or a variable resistance pressure sensor (see at least column 5, lines 44-67). In addition, Harris suggests a weighting device for used in vehicle which includes 4 load

cells, each including a strain gauge mounting assembly as shown in at least figures 2 and 3. Harris further suggests that the resilient mounting structure 40 allows it to flex freely so that the beam always bend in the same way when applied forces, thereby improving system accuracy (see column 2, lines 23-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have implemented the use of strain gauges mounted on a deflectable mounting structure as taught in Gagnon and Harris as the load cells for sensing more accuracy occupant weight.

10. With respect to claim 37, the Research disclosure does disclose that the load cell is mounted on the track structure (see figure 2).

11. With respect to claim 38, The Research disclosure does disclose a deflectable seat cushion on the frame (see figure 1).

12. With respect to claim 39, the Research disclosure does disclose the vehicle seat frame having a bottom portion and a back portion which together bear a vehicle occupant weight load (figure 1, forces A and B).

13. With respect to claims 40-47 and 49-55, the limitations of this claim has been noted in the rejections above and figure 3 and the related text of the Harris reference. It is therefore considered rejected as set forth above.

14. With respect to claim 48, Gognon does disclose the restraint device is not deployed if the seat occupant weight is below a predetermined weight (see at least column 7, lines 1-9).

15. Claims 58-60 and 66-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over the published Research Disclosure 39916 in view of Gognon and Harris as applied to the claims above, and further in view of Huss (5,343,755).

16. The Research disclosure, Gognon and Harris disclose the claimed invention as discussed above except that the sensor includes a sensor interface circuit includes a

pulse width modulation and a two stage signal amplifier and a temperature control. However, Huss suggest a stain gauge sensor which includes those features in at least the abstract, figure 2 and the related text. It would have been obvious to one of ordinary skill in the art to combine these teaching to provide the detail about the load cells which are used in the weight sensing apparatus for a vehicle seat.

17. Claims 61-63 and 69-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over the published Research Disclosure, Gognon and Harris as applied to the claims above, and further in view of Mazur et al. (5,906,393).

18. The Research disclosure, Gognon and Harris disclose the claimed invention as discussed above except that the controller calculates weight of an occupant by sampling the response of the load sensor. However, such feature is shown in at least figure 2 of the Mazur et al. reference. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate such teaching of Mazur into the combination system of the research, Gognon and Harris in order to provide more accuracy of the occupant weight.

19. The amended claims 56 and it's dependent 57 are allowable.

Conclusion

20. Claims 36-55 and 58-73 are rejected. Claims 56 and 57 are allowable.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Tan Nguyen, whose telephone number is (703) 305-9755. The examiner can normally be reached on Monday-Thursday from 5:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski, can be reached on (703) 308-3873.

Any response to this action should be mailed to:

Art Unit: 3661

Commissioner of Patents and Trademarks
Washington, D.C. 20231

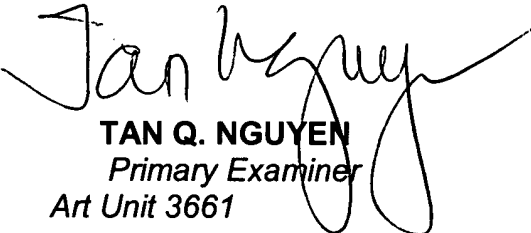
or faxed to:

(703) 305-7687, (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park V, 2451
Crystal Drive, Arlington, VA., Seventh Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be
directed to the Group receptionist whose telephone number is (703) 308-1113.

/tqn
July 9, 2003


TAN Q. NGUYEN
Primary Examiner
Art Unit 3661